

Computer Science, PhD

Degree Requirements and Restrictions

The general requirements for the Ph.D. degree comply with those of the School of Graduate School. The requirements include a preliminary examination, completion of coursework, a qualifying examination, completion of significant research documented in a dissertation and the dissertation defense.

Major/Minor Subjects

A minimum of 54 hours of graduate course credit plus a minimum of 18 dissertation credit hours is required for the Ph.D. in computer science. The program of study will be approved by the student's Supervisory Committee. Coursework grade requirements are the same as for the M.S. degree. Coursework taken as part of a graduate degree program at another institution may be applied to the degree with permission of the student's Supervisory Committee.

The program must include the below courses and must have a coherent area of emphasis, of which at least 6 semester hours must be at the 700 level. At least 9 semester hours of graduate level mathematics must also be included in the program.

Code	Title	Semester Hours
CS 524	PRINCIPLES PROGRAMMING LANG	3
CS 603	FORMAL LANG/AUTOMAT THRY	3
CS 613	COMPUTER ARCHITECTURES	3
CS 617	DES & ANALY OF ALGORITHM	3
CS 650	SOFT'W ENGINEERING PROC	3
CS 690	ADVANCED OPERATING SYSTEMS	3
Total Semester Hours		18

Additional Information

Preliminary Examination

Ph.D. students will be required to take a preliminary examination, consisting of (1) a written test covering fundamental concepts in Computer Science and (2) an evaluation by the graduate faculty of the student's overall academic potential.

The examination must be taken within a year after admission to the Ph.D. program, or at the earliest opportunity upon completion of the core coursework. Successful completion of the examination will provide evidence of the student's ability to continue in pursuit of the Ph.D. degree. The examination can be taken no more than twice.

Admission to Candidacy

To be admitted to candidacy for the Ph.D. degree, students must first pass the qualifying examination. The qualifying examination can cover any aspect of the student's program and is taken after completion of the student's coursework and upon recommendation of the student's supervisory committee. It is designed to test students' fitness for pursuing research projects in their chosen areas and to test their general knowledge of computer science. As part of the qualifying examination, each student will present a research proposal to the supervisory committee.

Residency Requirements

According to graduate school policy, residence may be established through either (i) being enrolled as a full-time student (at least 9 graduate semester hours) either for one continuous academic year, or for Spring and Fall semesters in the same calendar year, or (ii) being enrolled in at least 6 hours of graduate course work in at least three of four consecutive semesters.

Other Requirements for the PhD Degree

- The program must be completed within five years after admission to candidacy.
- The Qualifying Examination may be taken no more than twice.
- CS 799 is required each semester a student is receiving direction on the doctoral dissertation.

For additional requirements, consult the Academic Information (<http://catalog.uah.edu/grad/academic-info/>) Section of this Graduate Catalog.

Dissertation

A public defense of the dissertation is required. Three conference papers or one journal article related to the dissertation work must be published or accepted prior to scheduling the dissertation defense.